

Figure 1: Localisation of mutations in Fermichamp HXT3

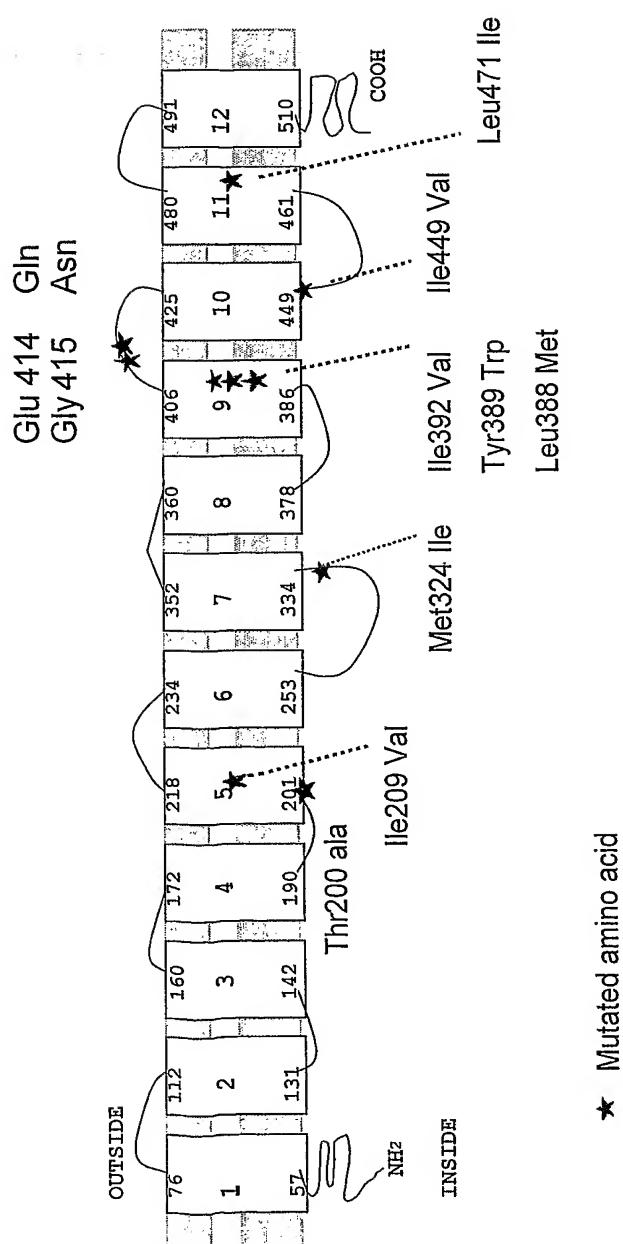


Figure 2A Construction of V5 strains with integrated *HXT3* genes

HXT3 integration in V5 *hxt1-7Δ* strain

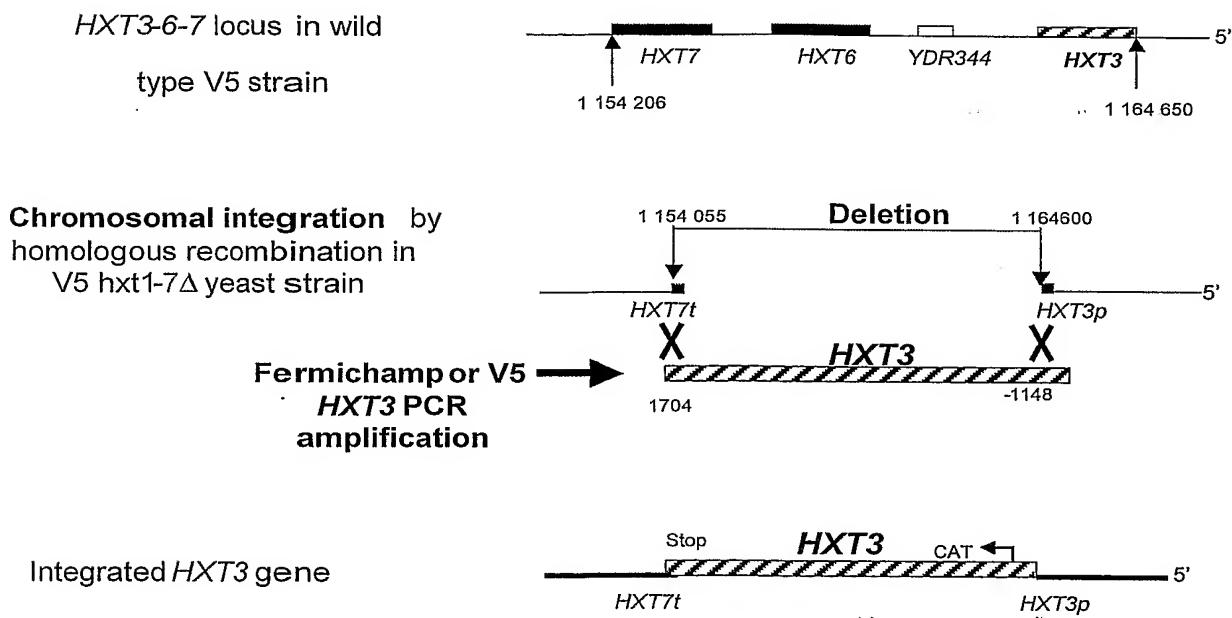


Figure 2B : *HXT3* ORF cloning in multicopy plasmid p4H7

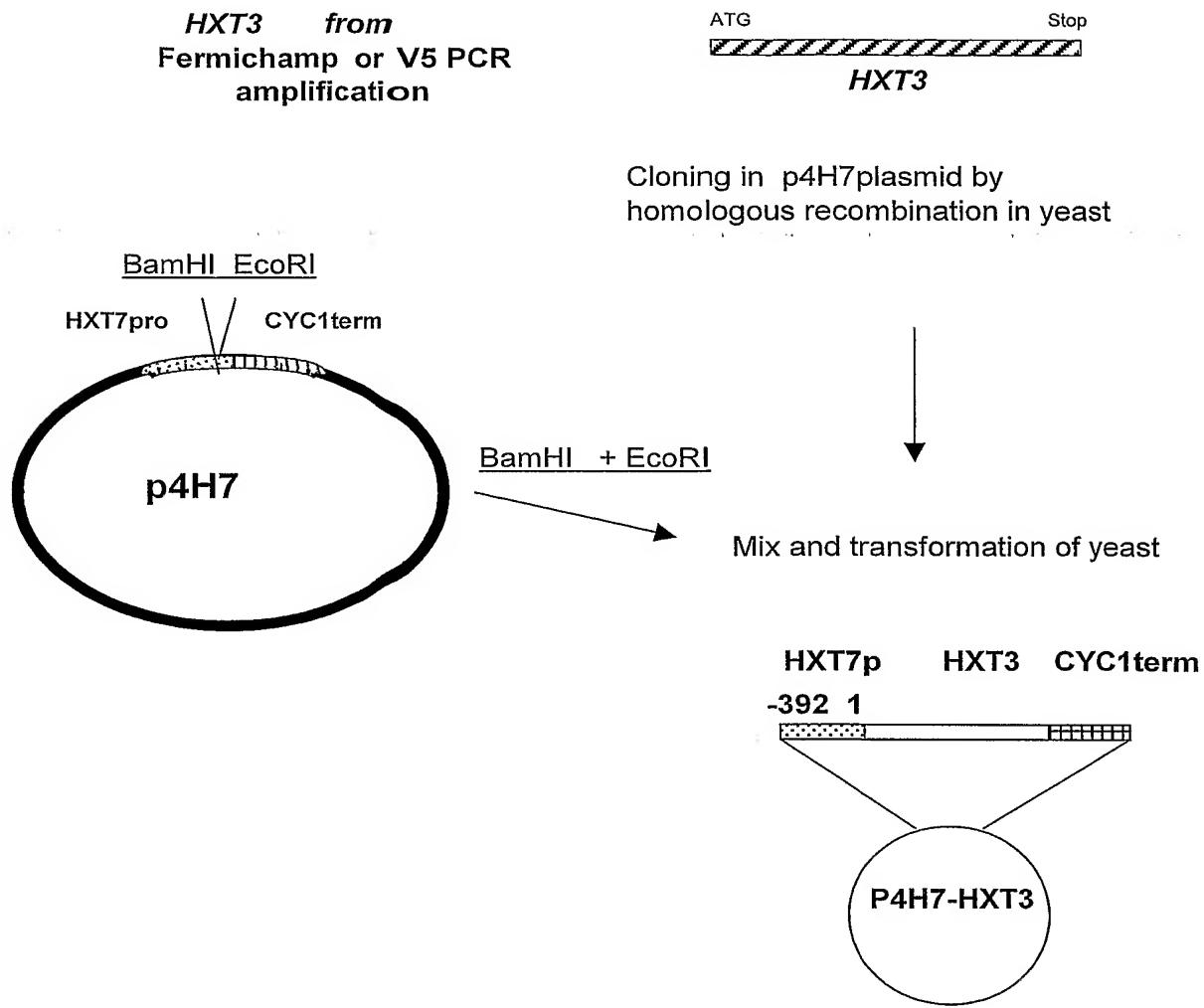


Figure 3A glucose and fructose utilisation by *HXT3* (**V5** or **Fmp**) single copy gene expression

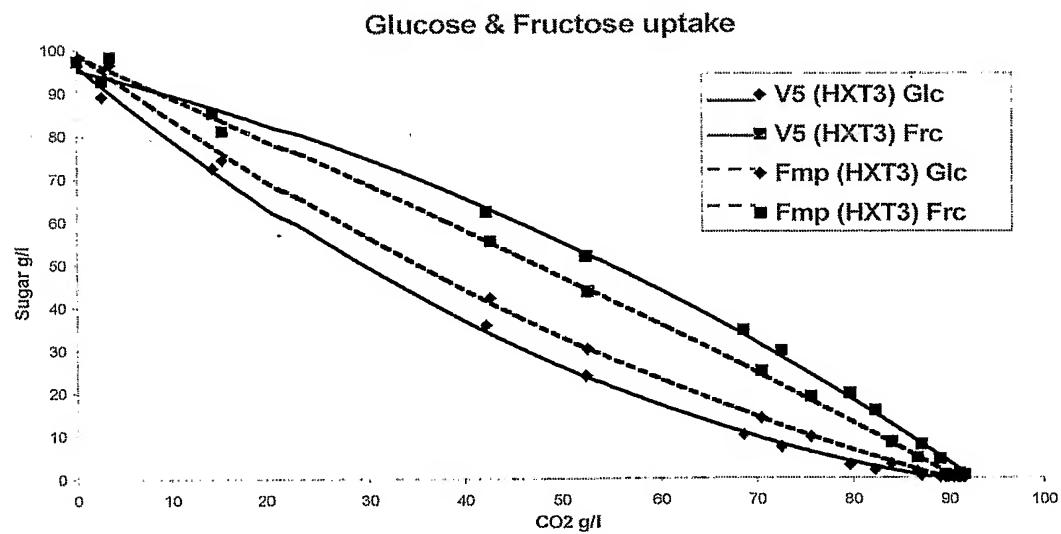


Figure 3B : glucose/fructose ratio of *HXT3* (V5 or Fmp) single copy gene expression

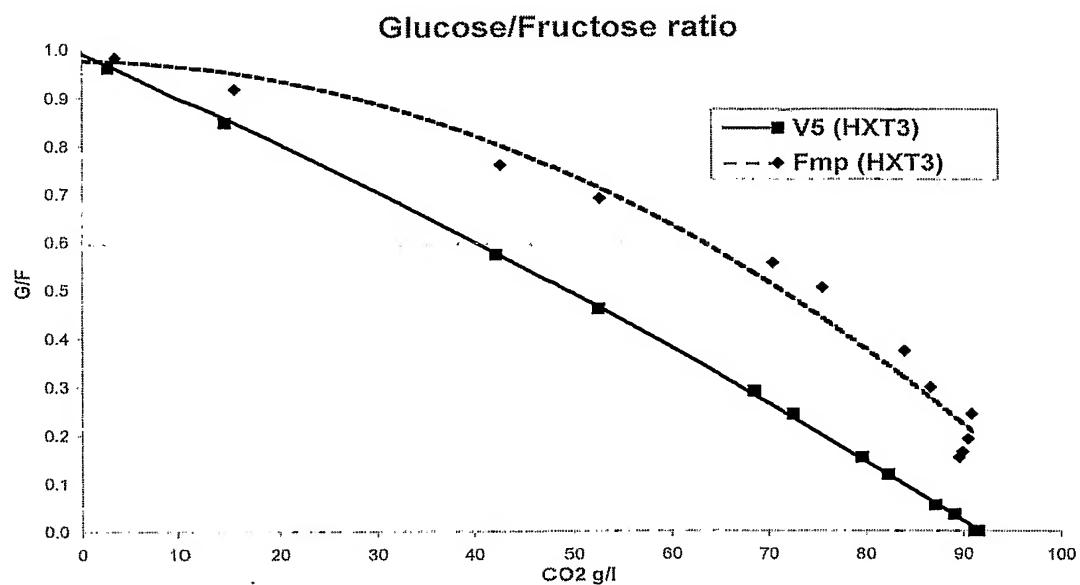


Figure 3C : fermentation rate of *HXT3* (**V5** or **Fmp**) single copy gene expression

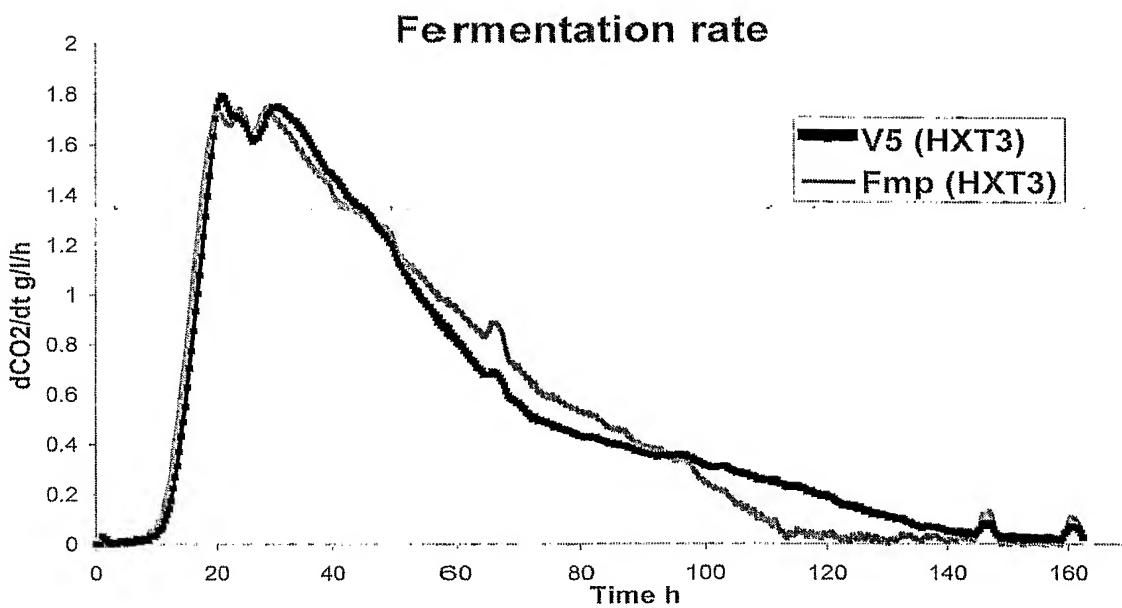


Figure 3D

Comparison of Glucose / Fructose ratio between Fermichamp & *HXT3* (V5 or Fmp) single copy gene expression

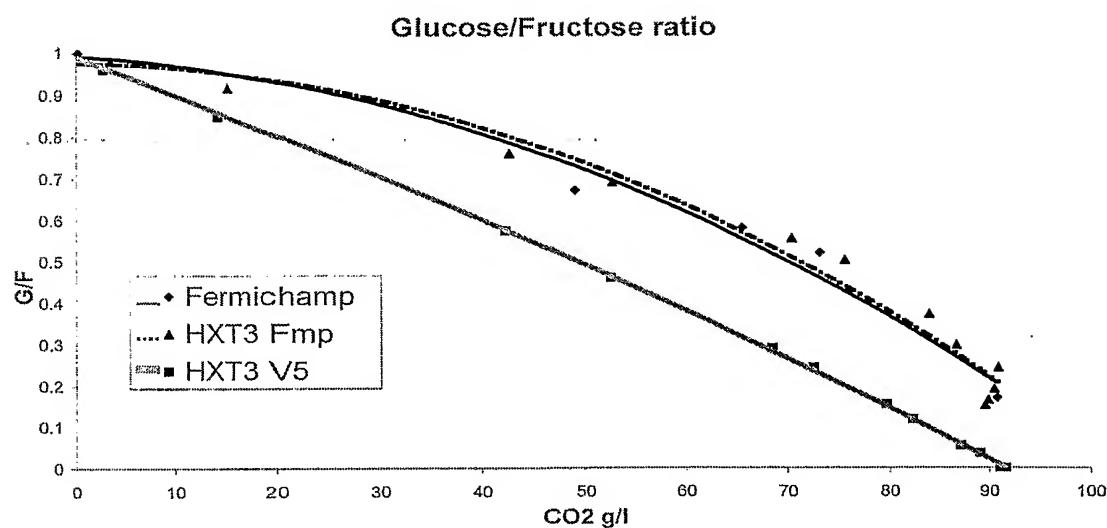


Figure 3 E: Comparison of Glucose / Fructose ratio between Fermichamp, Fermivin & *HXT3 Fmp* single copy gene expression

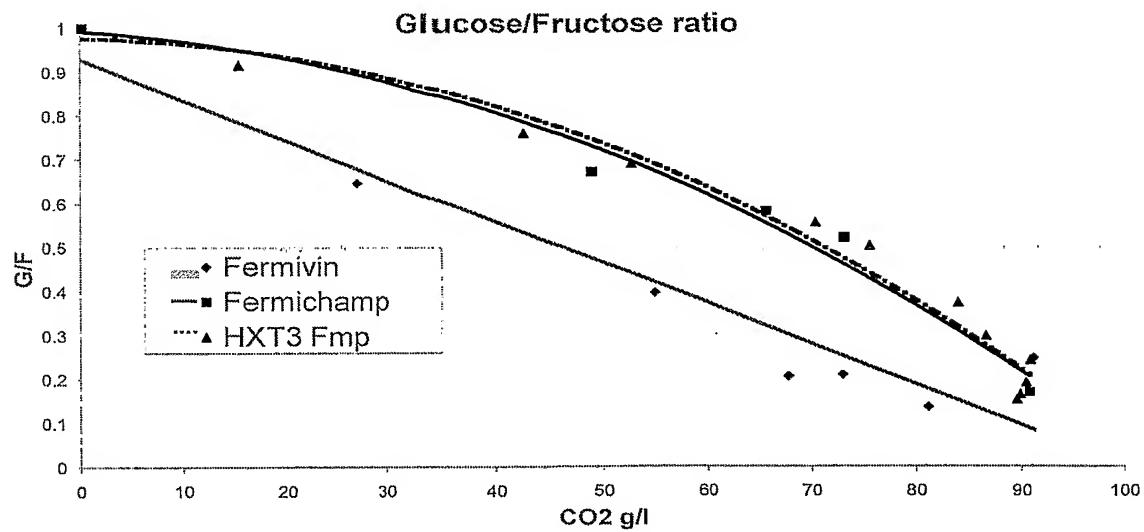


Figure 4A : glucose and fructose utilisation by multicopy overexpression of *HXT3* (V5 or Fmp)

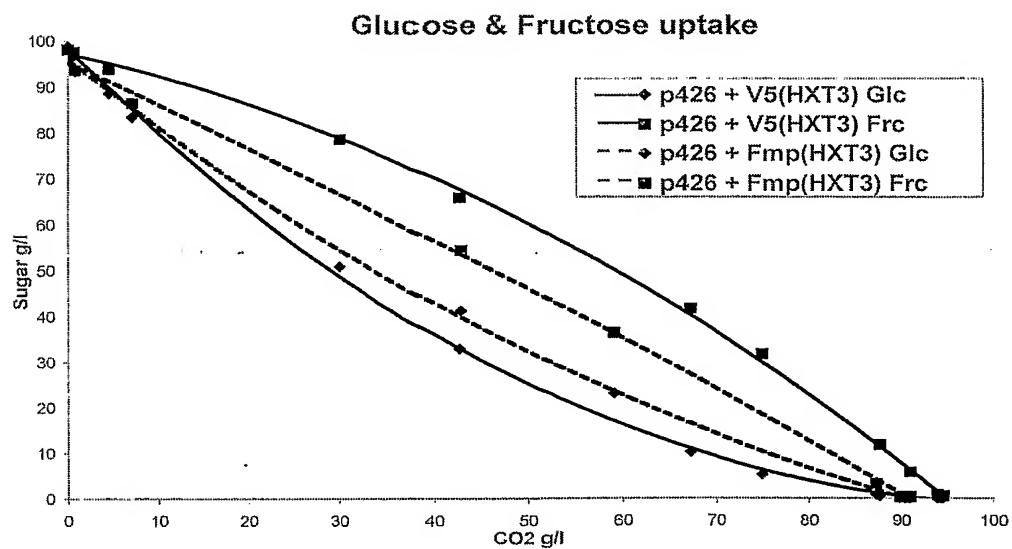


Figure 4B : glucose/fructose ratio by multicopy overexpression of *HXT3* (V5 or Fmp)

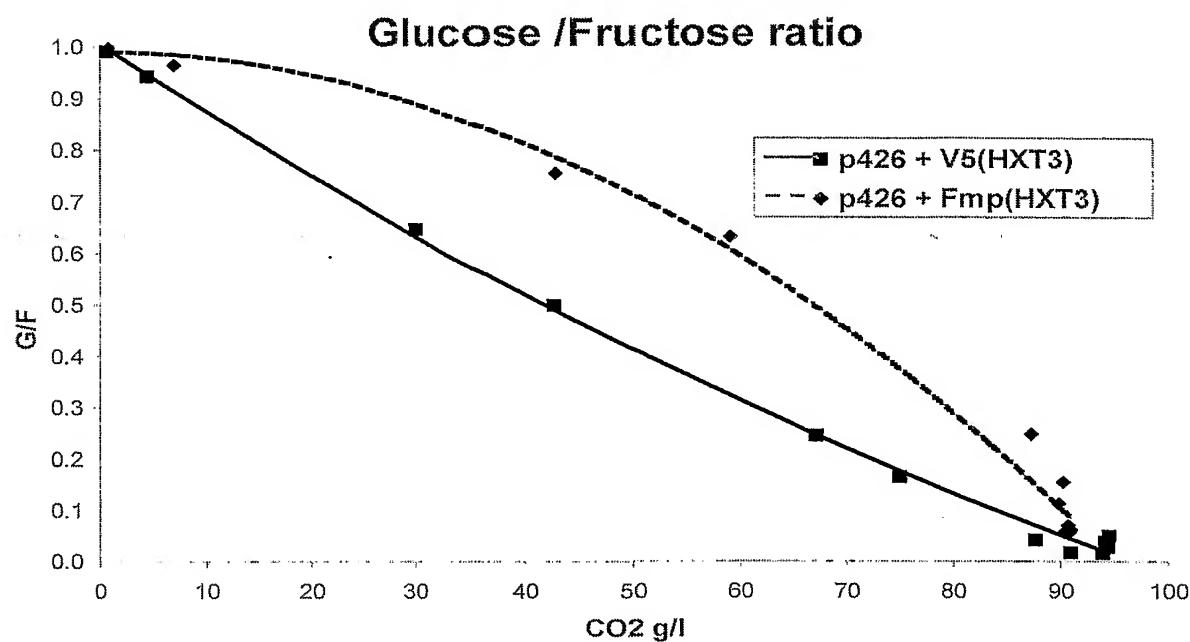


Figure 5 : Multicopy overexpression of *HXT3* (V5 or Fmp) on Glucose + Fructose (50/50) must (200g/l)

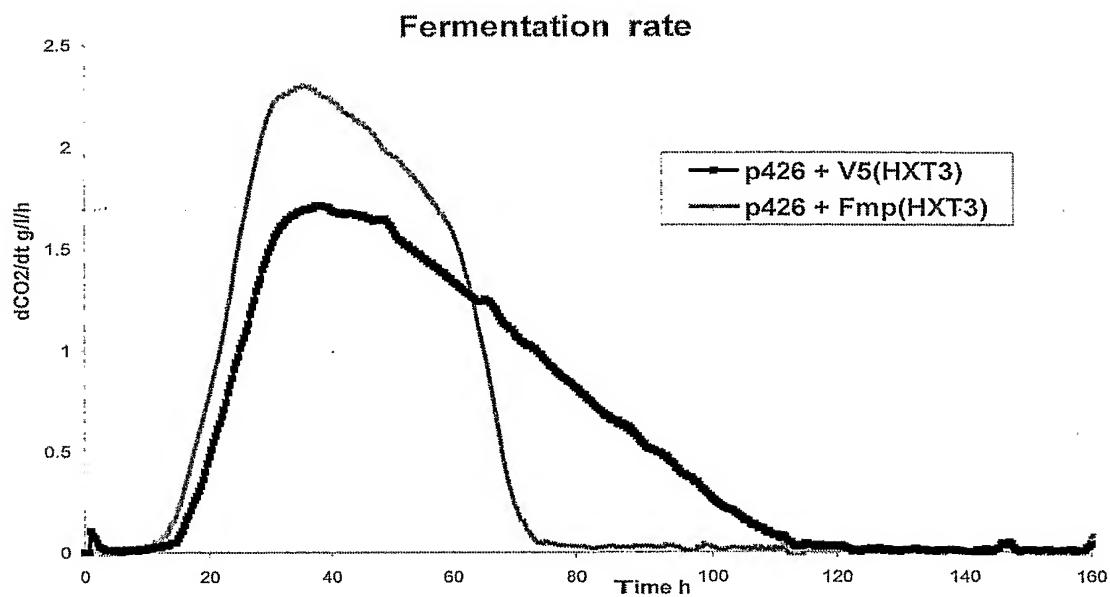


Figure 6A : Multicopy overexpression of *HXT3* (V5 or Fmp) on pure Fructose must (200g/l)

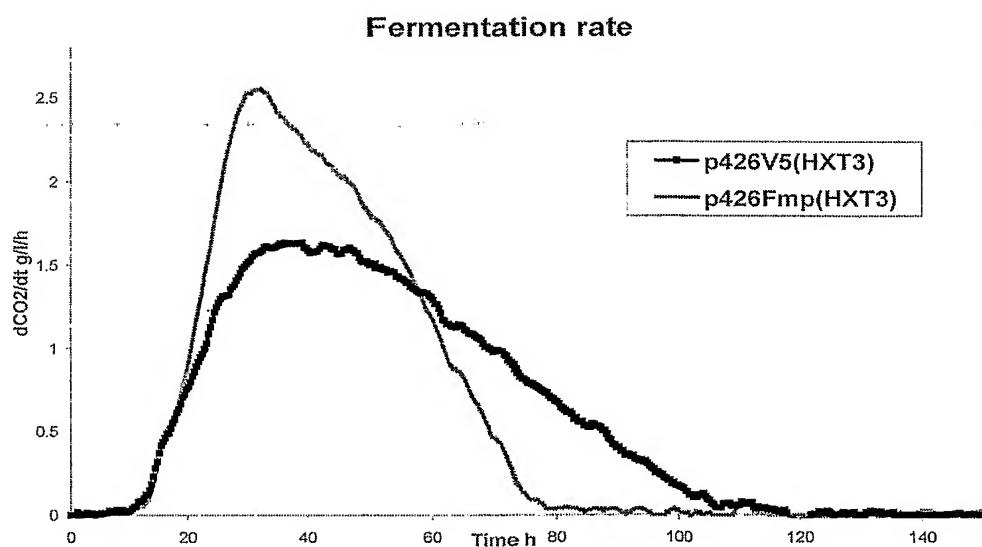


Figure 6B : Multicopy overexpression of *HXT3* (V5 or Fmp) on pure Glucose must (200g/l)

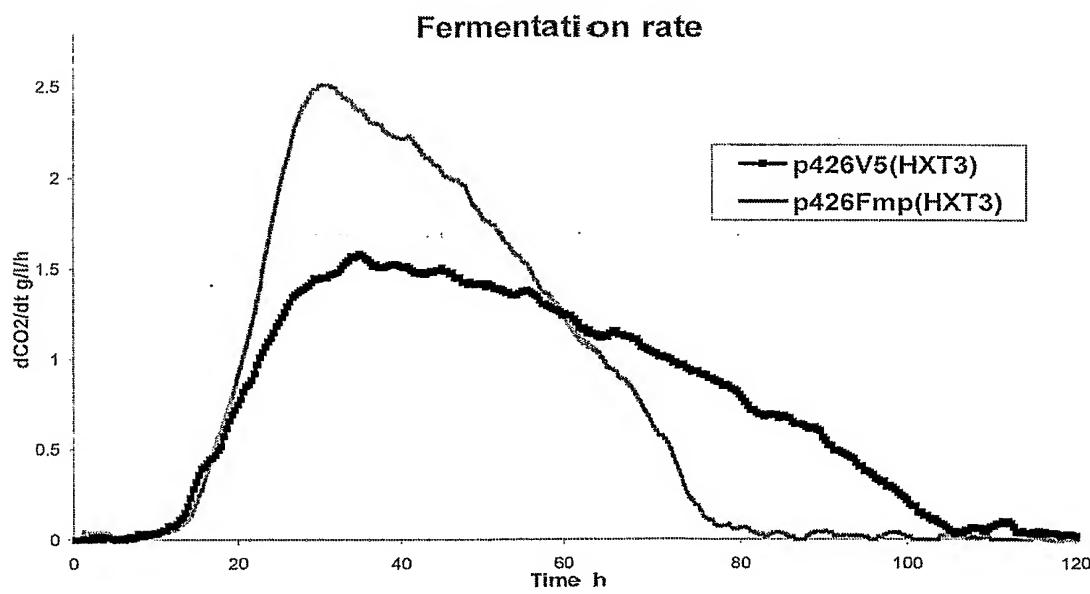


Figure 7A : Single copy expression of *HXT3* (V5 or Fmp) on pure Fructose must (200g/l)

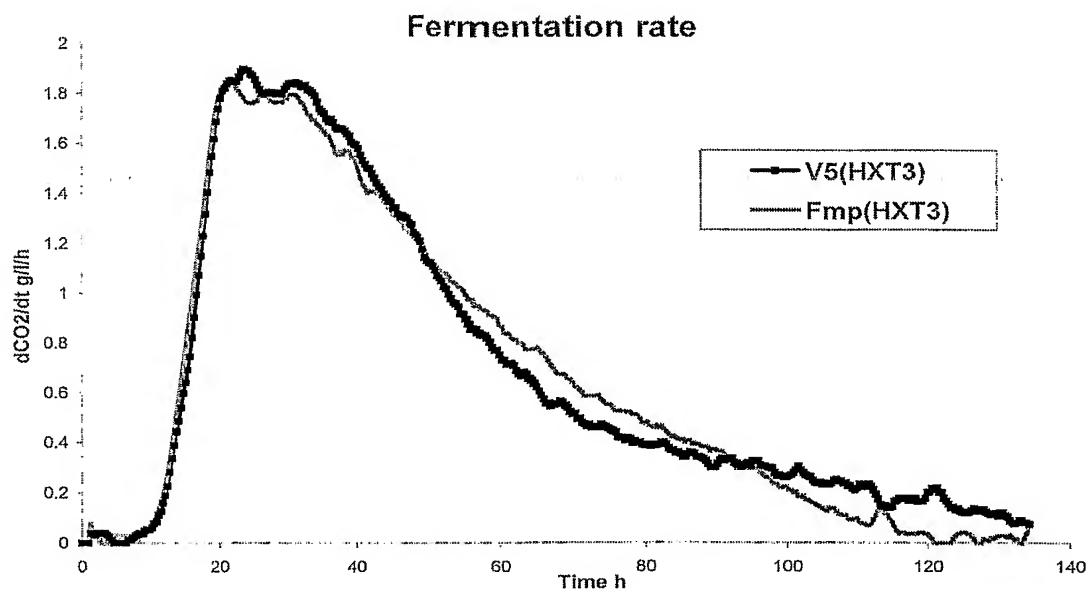


Figure 7B : Single copy expression of *HXT3* (V5 or Fmp) on pure Glucose must (200g/l)

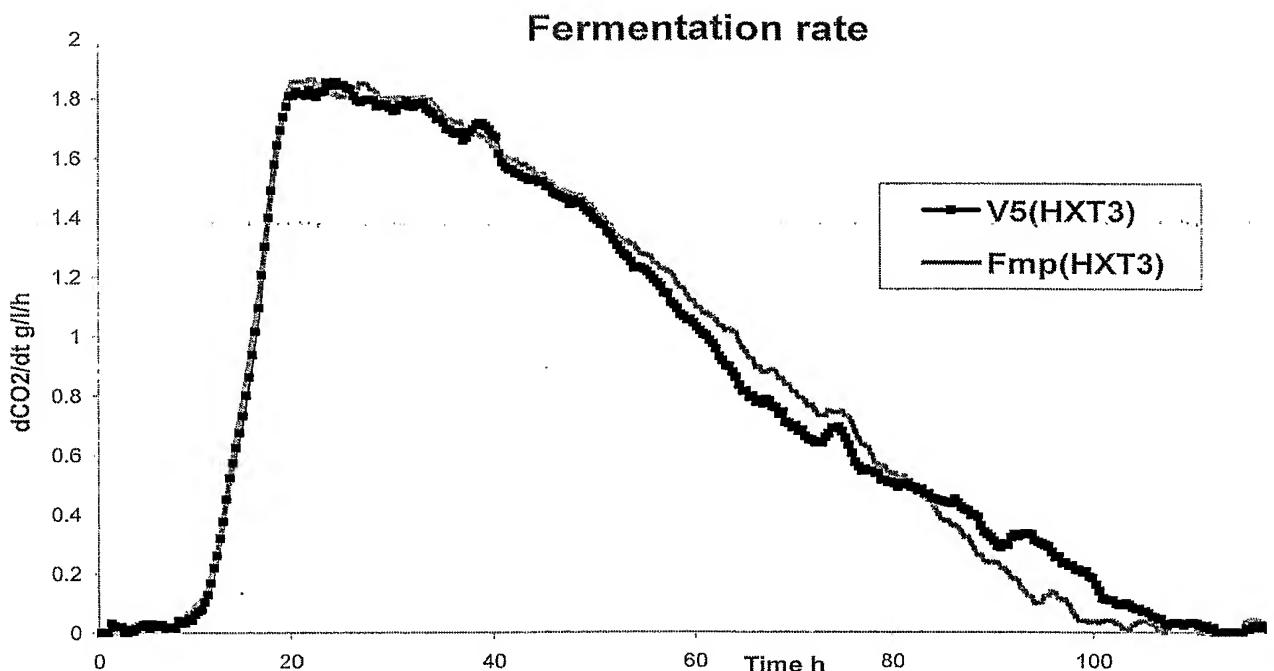


Figure 8: Construction of strains that contain a single, inactive, *HXT3* gene, general scheme of strains construction

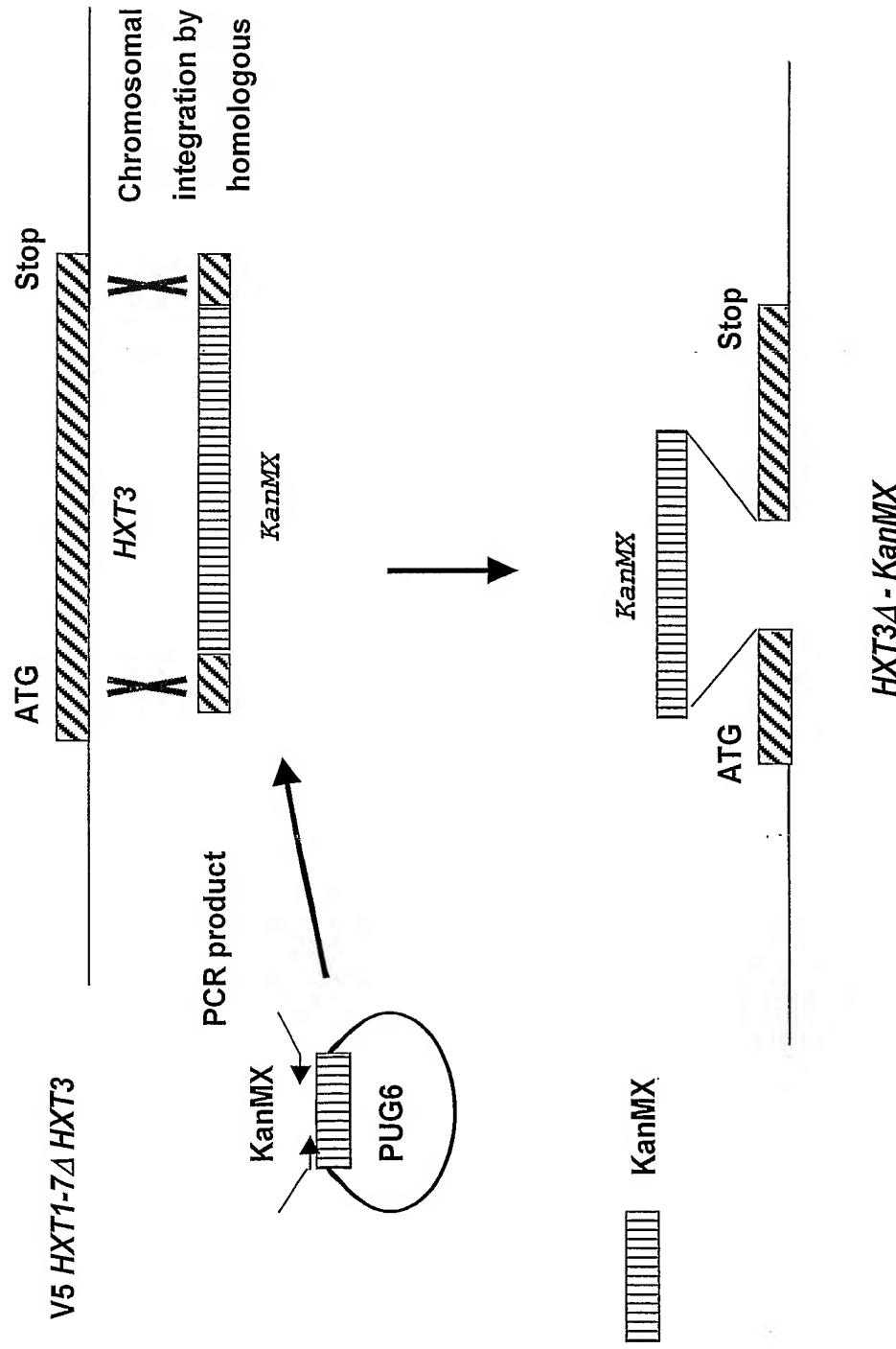


Figure 9: Constructed strains comprising a single, inactive *HXT3* gene

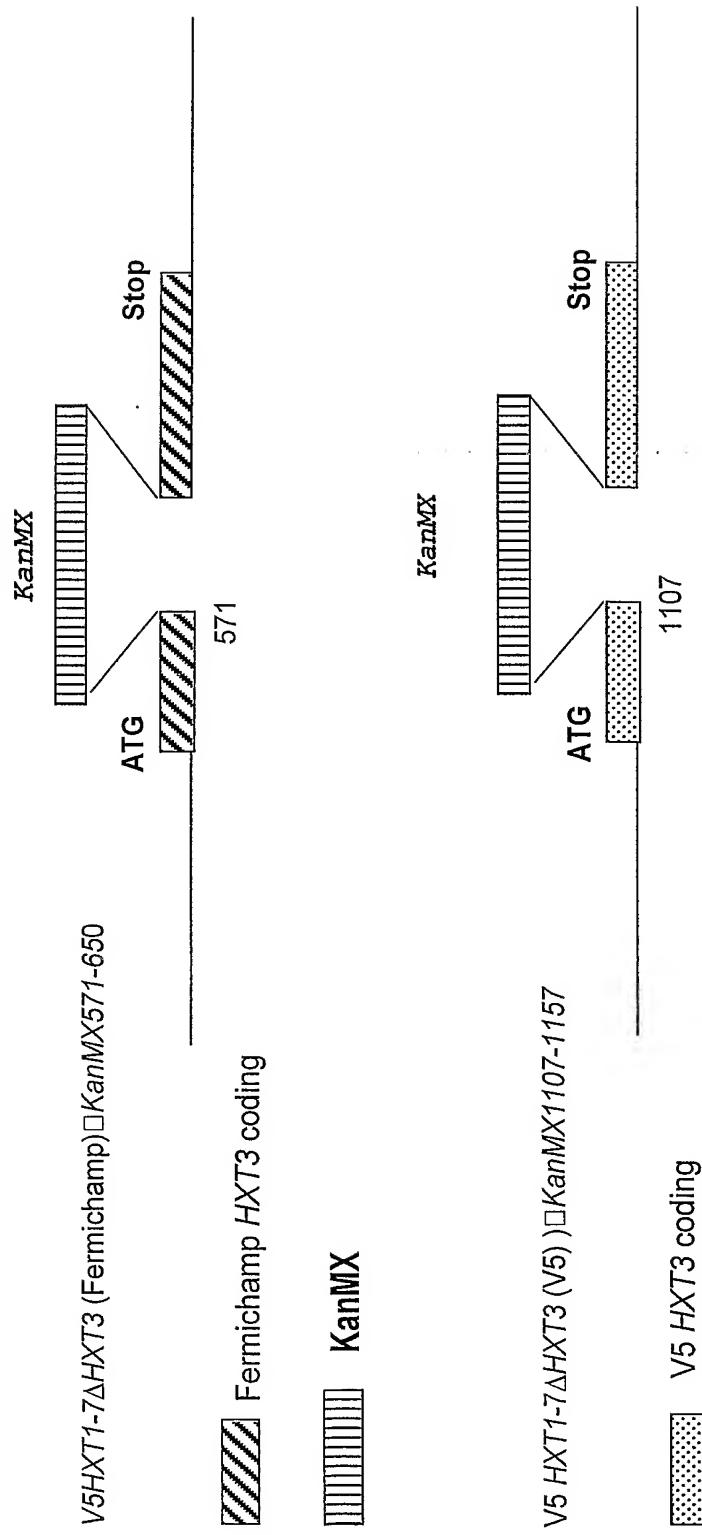


Figure 10: Construction of strains expressing *HXT3* chimera: principle of construction

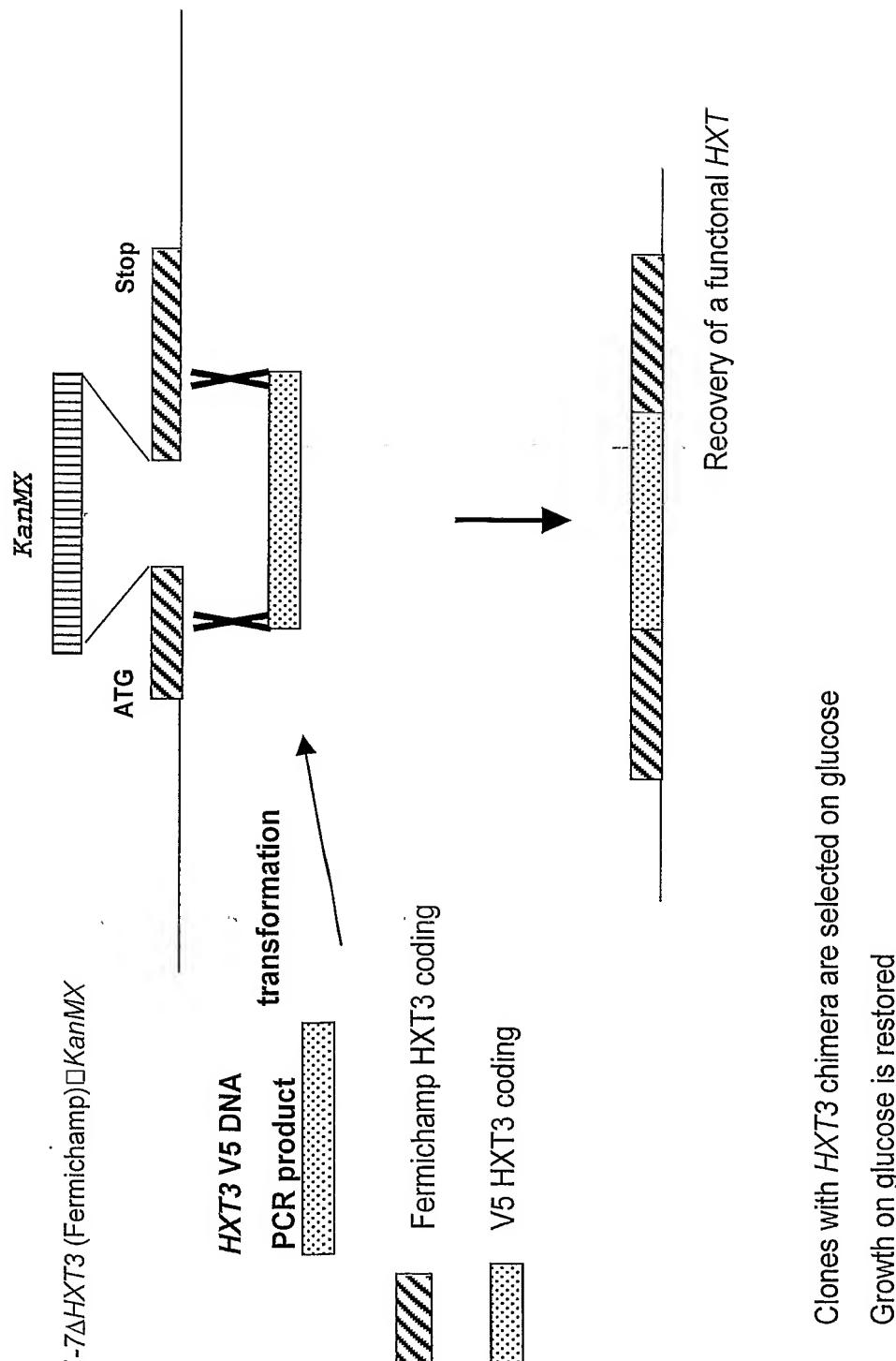
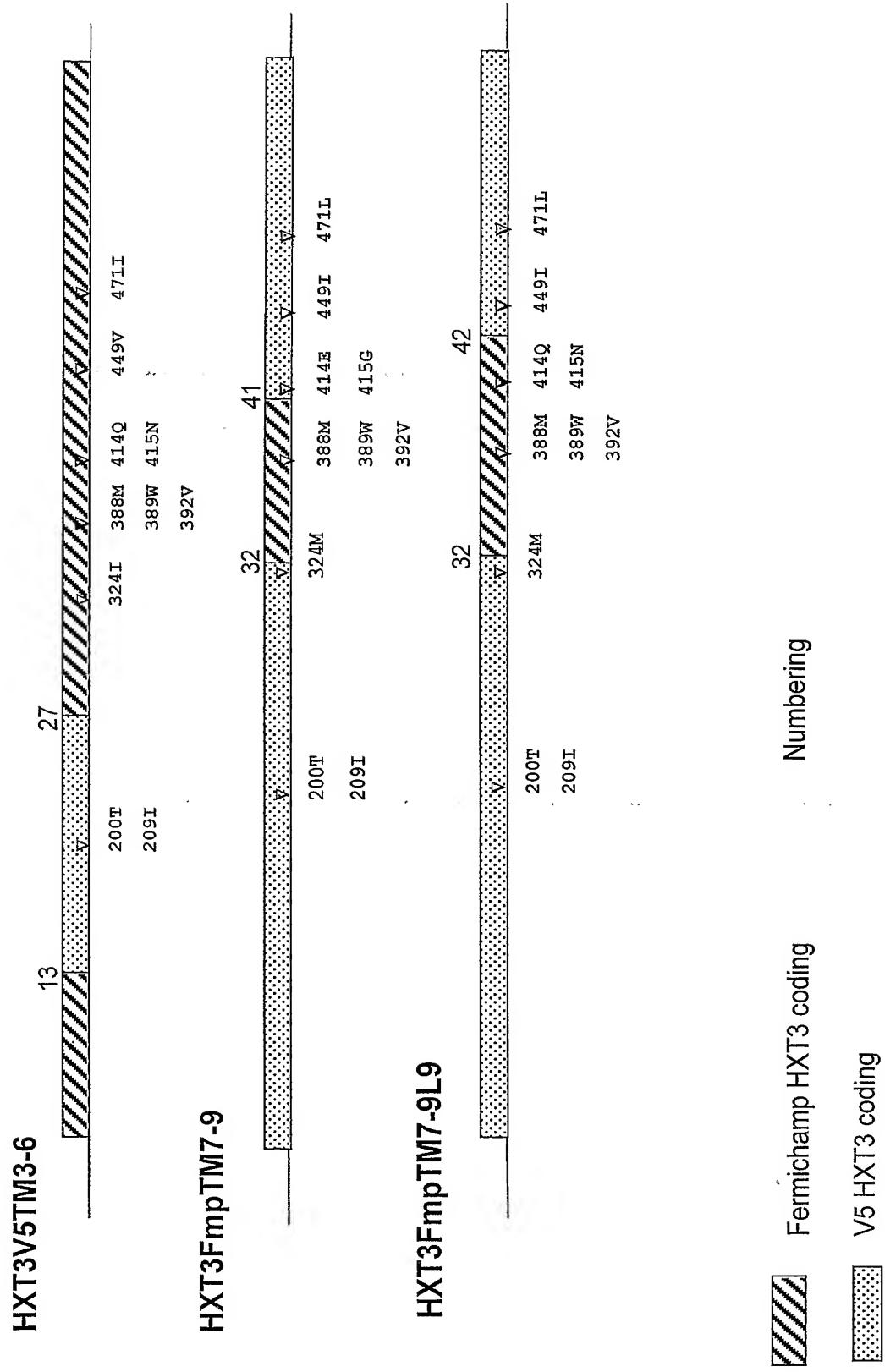


Figure 11: Chimeric *HXT3* proteins expressed

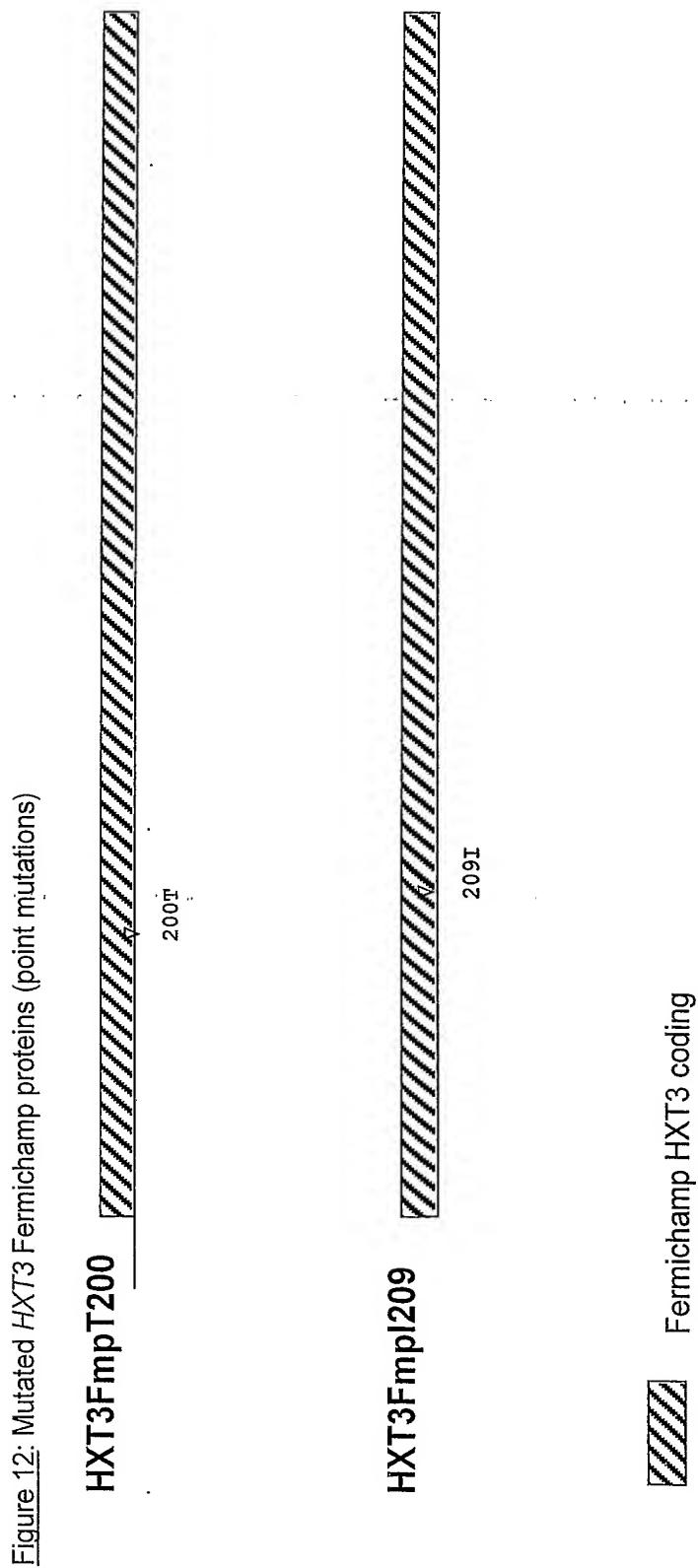


Figure 13: Glucose-Fructose ratio evolution during alcoholic fermentation

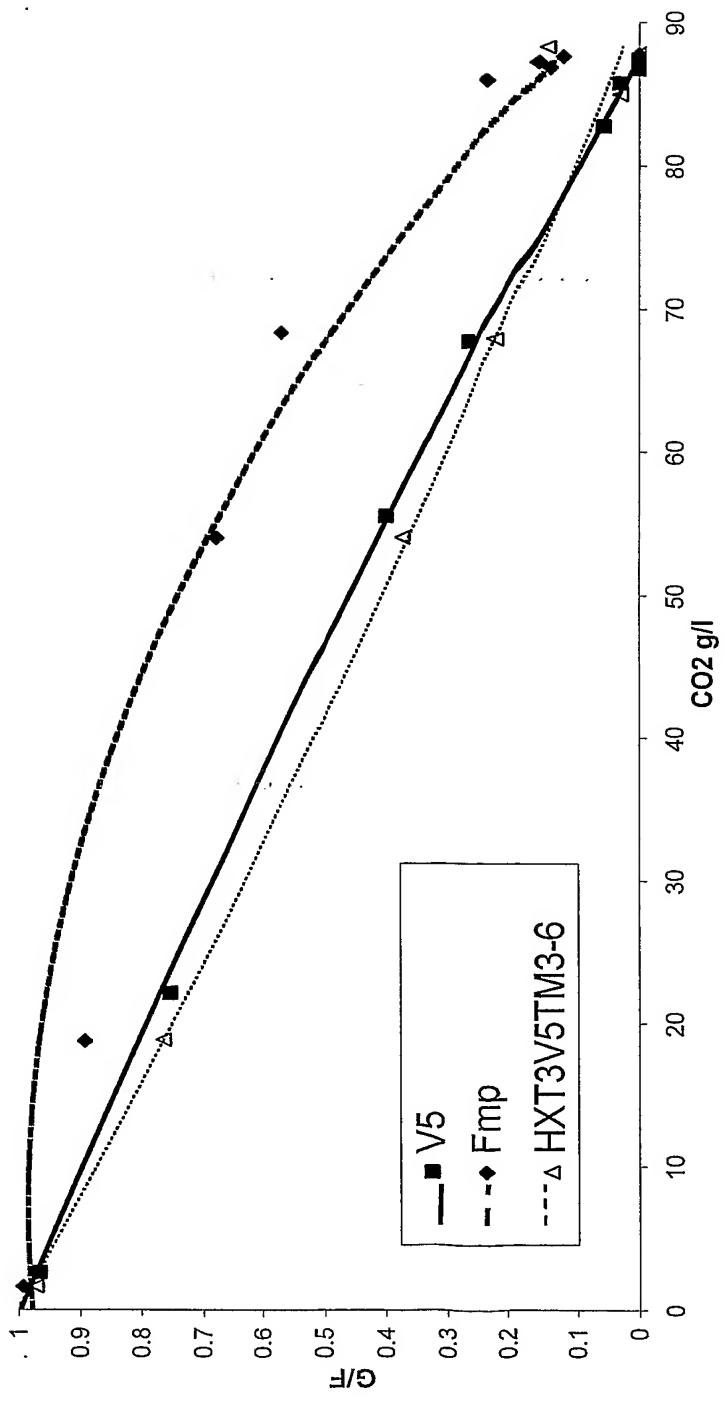


Figure 14: Glucose / Fructose ratio evolution during alcoholic fermentation

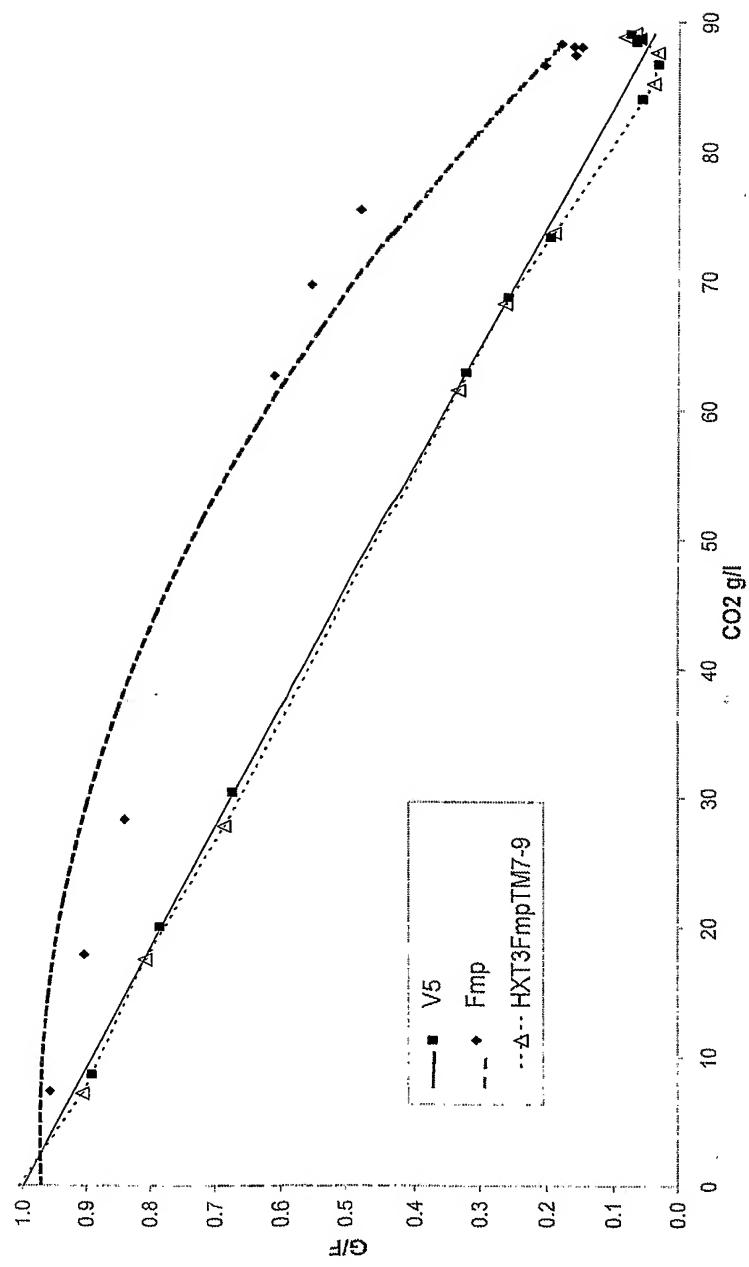


Figure 15: Glucose/Fructose ratio evolution during alcoholic fermentation

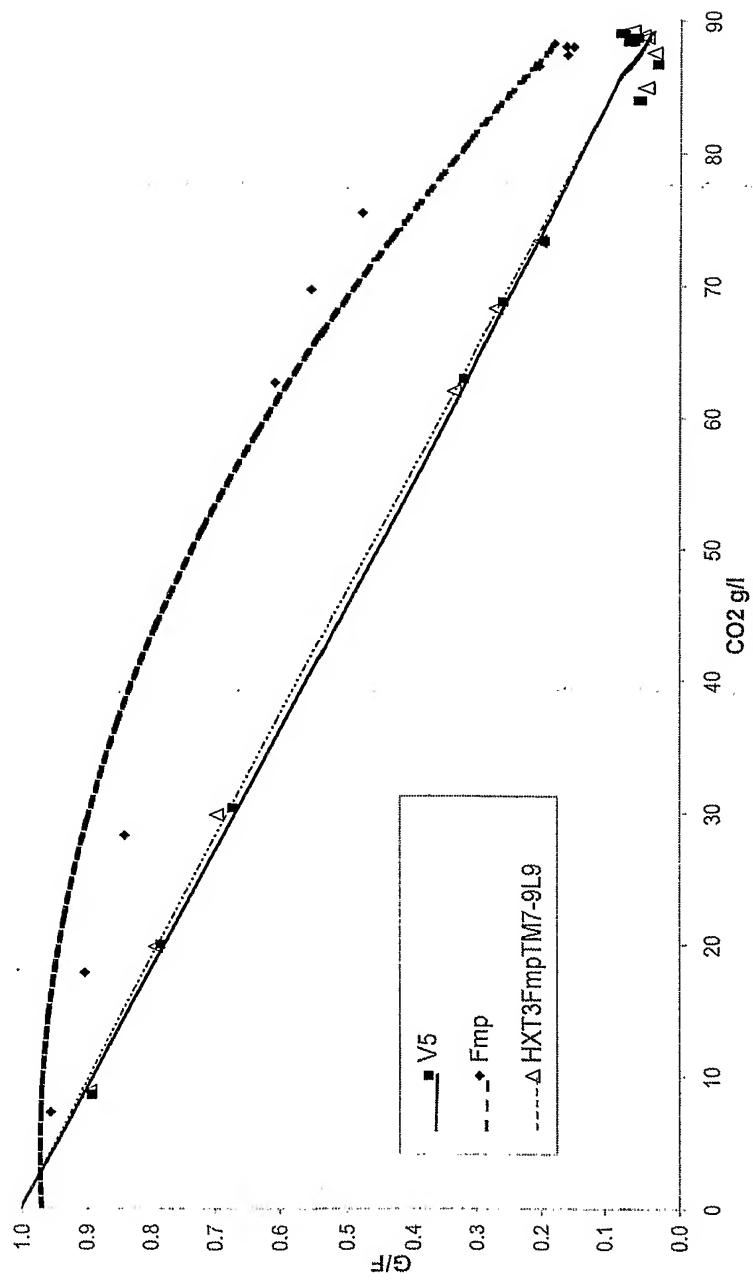


Figure 16: Glucose/Fructose ratio evolution during alcoholic fermentation

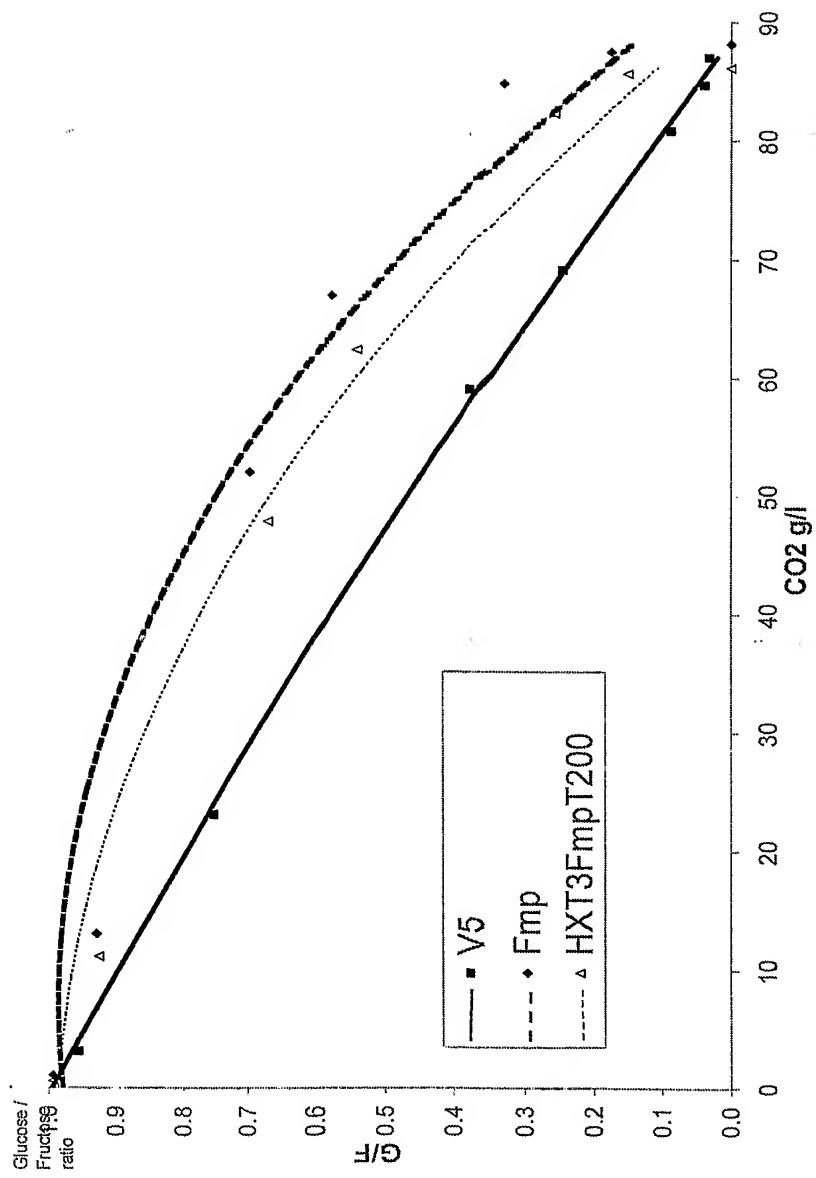


Figure 17: Glucose/Fructose ratio evolution during alcoholic fermentation

